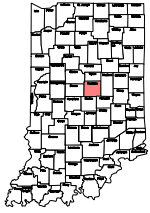


Pertussis Cases in Hamilton County

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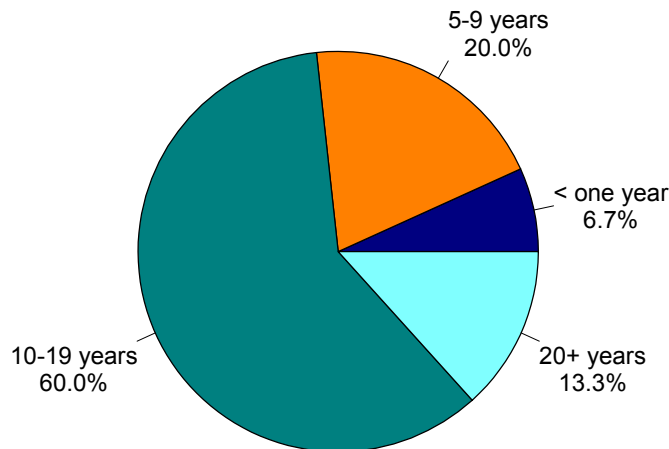
Fifteen cases of pertussis occurred in Hamilton County during the last three months of 2001 (Hamilton County reported two cases of pertussis in 2000). Pertussis (whooping cough) is an acute infectious cough illness caused by the bacterium *Bordetella pertussis*, with incidence normally peaking during the months of July-October, rather than later in the year.

The cough onset of the 15 Hamilton County cases ranged from October 15 until December 8. Cases ranged in age from 2 months to 49 years of age. Eighty percent (80%) of the cases occurred in the 10-19 age group (Figure 1). Five of the cases occurred among students in one high school, four others occurred in one junior high school, and three other cases occurred in one elementary school. In addition, one of the adults worked at the elementary school where the three cases occurred.

Figure 1.

Pertussis Incidence - Hamilton County Percent of Cases by Age Group*

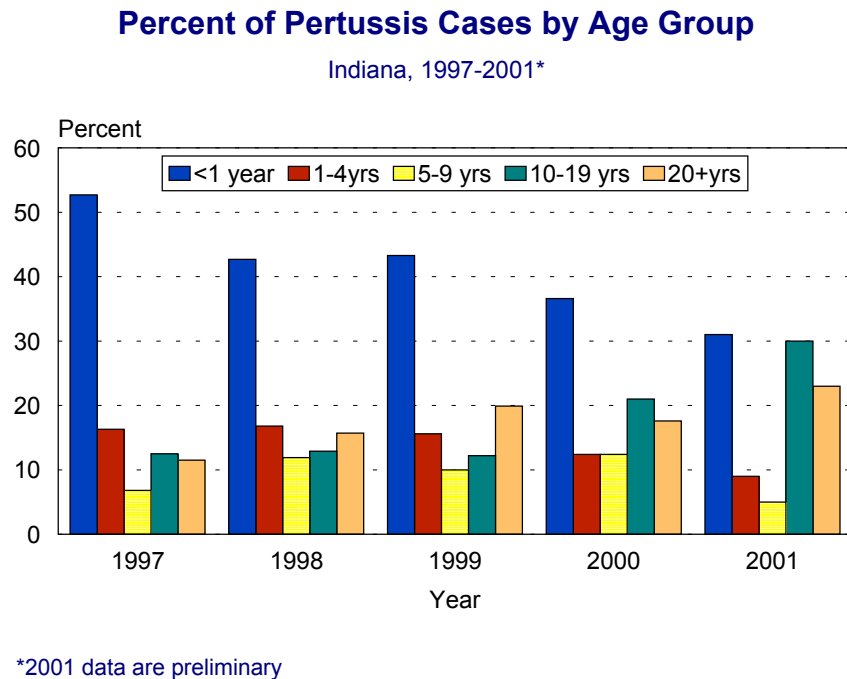
October - December, 2001



*no cases occurred in the 1-4 year age group

Immunity to pertussis begins to wane 5-10 years following the last vaccine dose (appropriately given at 4-6 years of age) and, therefore, pertussis in adolescents and adults can occur even though they were fully vaccinated as a child. The disease may be milder in older persons, but these infected persons may transmit the disease to other susceptible persons, including unimmunized or partially immunized infants, who are at highest risk for complications. In recent years, probably due to better recognition of adolescent and adult cases on the part of providers, the percentage of cases in the 10-19 and 20+ age groups has increased (Figure 2).

Figure 2.



One hundred and fifty-three (153) cases of pertussis were reported in Indiana during 2000, while preliminary data for 2001 show 104 cases. Pertussis cases increased slightly in Indiana during the 1990s with an average of 112 cases being reported per year, as compared with 108 cases per year during the 1980s.

Effective measures for the control of pertussis include the following:

- Ensure that all infants and children are up-to-date on their pertussis vaccination schedule. If not, bring them up-to-date using the accelerated immunization schedule approved by the ACIP.
- Health Care Providers should consider a diagnosis of pertussis in persons of any age who have a persistent cough of 10-14 days or longer.
- Health Care Providers should report any suspected case of pertussis immediately to their local health department.
- Appropriate antibiotic therapy is recommended for all cases and household contacts of cases, irrespective of age or vaccination status.
- If possible, prior to the initiation of antibiotic therapy, appropriate laboratory specimens should be collected and submitted for analysis. Culture and DFA are the preferred methods of laboratory analysis and are available at the ISDH Special Reference Bacteriology Laboratory (call 317-233-8105 to obtain test kits or 317-233-8040 for specimen handling, shipping or interpretation of results). PCR is also acceptable if done in conjunction with culture (PCR testing for pertussis is not currently available at the ISDH Laboratory). In the absence of standardization, serological test results should not be relied on for case confirmation for the purposes of reporting.

A more detailed document entitled "Recommended Pertussis Control Measures" is available from the Communicable Control Disease Program by calling 317-233-7112.
